

COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDERS, ELECTRICAL CARD, WEDGE RETAINERS, 3 PIECE,
SCREW ACTUATED DRIVE, .220 X .220 INCH BODY SIZE

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

The complete requirements for procuring electrical card holders described herein shall consist of this document and the latest issue in effect of CID A-A-59590.

SCOPE. This CID specification sheet covers three piece card holders that use screw actuated wedges to hold circuit card assemblies into their installed positions in heat sinking devices (cold plates, heat exchanger) or other applications. Card holders covered by this CID are intended to provide 60g/6ms resistance to shock, withstand 25 G-rms of vibration and provide 2 to 4 degrees C/W/inch thermal resistance between the circuit card assemblies and the heat sink surfaces. Items covered by this CID specification sheet are intended for commercial/industrial applications.

CLASSIFICATION. This CID specification sheet uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see notes).

AA59590	/07	C, B, H	N, J, T, V, K, R, S	**	W, D, E
CID number	Applicable CID sheet	Finish	Mounting	Length	Options

SALIENT CHARACTERISTICS.

Performance. Card holders shall hold the circuit card firmly in place providing high resistance to shock and vibration while providing maximum thermal transfer.

Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified herein and the general CID.

Expanded and relaxed dimensions. Expanded and relaxed dimensions shall be as specified in figure 1.

Mounting options. The mounting options shall be as specified in A-A-59590.

Mounting holes (when required). Two mounting holes are required on card holders less than 6.00 inches (152.4 mm) in length. Three mounting holes are required on card holders 6.00 inches or greater in length. The third mounting hole shall be centered on the mounting body. See table I and figure 1 for mounting hole spacing requirements.

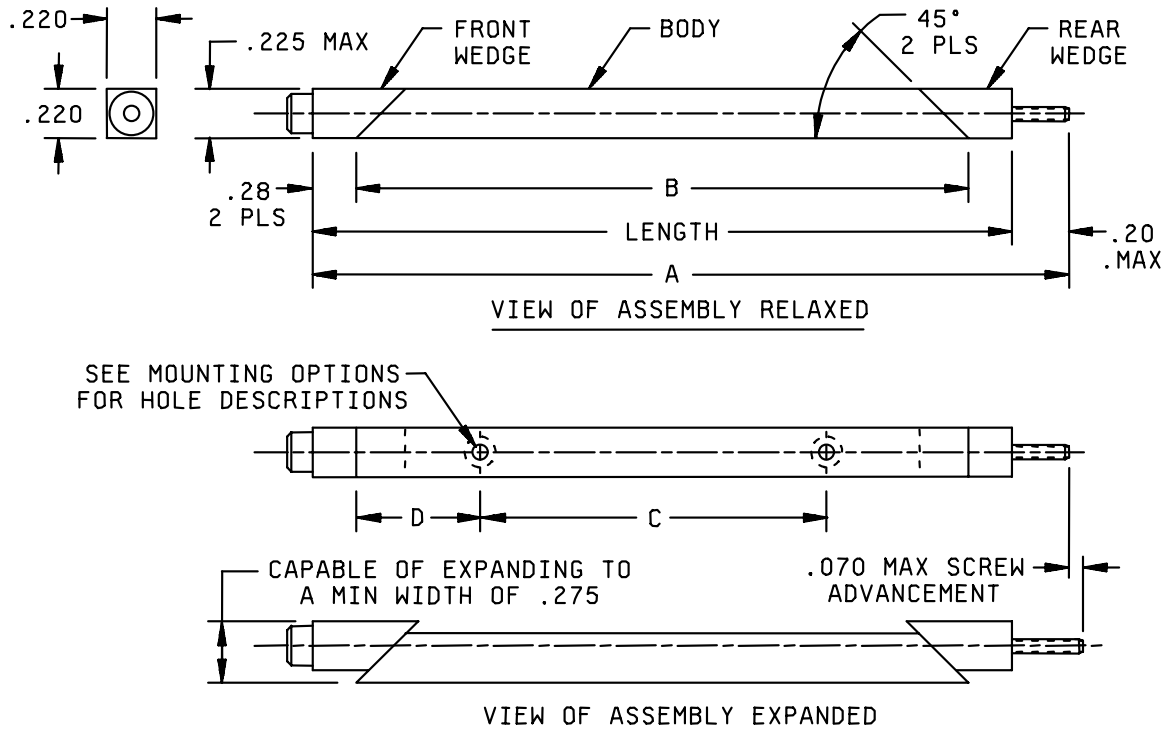


FIGURE 1. Relaxed and expanded dimensions.

TABLE I. Assembly dimensions.

PIN length designator	Dimension "LENGTH" $\pm .02$	Dimension "A" $+ .02 / - .09$	Dimension "B" $\pm .03$	Dimension "C" $\pm .005$	Dimension "D"
28	2.8 (71.1)	3.00 (76.2)	2.24 (56.9)	.90 (22.9)	.70 (17.8)
30	3.0 (76.2)	3.20 (81.3)	2.44 (62.0)	1.10 (27.9)	.70 (17.8)
35	3.5 (88.9)	3.70 (94.0)	2.94 (74.7)	1.60 (40.6)	.70 (17.8)
38	3.8 (96.5)	4.00 (101.6)	3.24 (82.3)	1.90 (48.3)	.70 (17.8)
48	4.8 (121.9)	5.00 (127.0)	4.24 (107.7)	2.90 (73.7)	.70 (17.8)
53	5.3 (134.6)	5.50 (139.7)	4.74 (120.4)	3.40 (86.4)	.70 (17.8)
58	5.8 (147.3)	6.00 (152.4)	5.24 (133.1)	3.90 (99.1)	.70 (17.8)

Options. Card holders can have the following options. Card holders not requiring one of the following options shall leave the options position in the PIN blank.

Lockwasher and flatwasher (see figure 2). A lockwasher and flatwasher located under the screw head will provide for additional resistance to loosening from shock and vibration. Card holders requiring a lockwasher and flatwasher option shall include a suffix "W" in the PIN (see classification and notes).

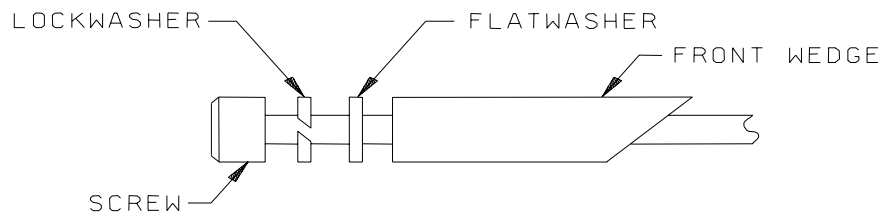


FIGURE 2. Lockwasher and flatwasher details.

Screw self-locking element (see figure 3). The use of a screw self-locking element will provide prevailing torque for resistance to loosening from shock vibration. Card holders requiring a screw self-locking element shall include a suffix "E" in the PIN (see classification and notes).

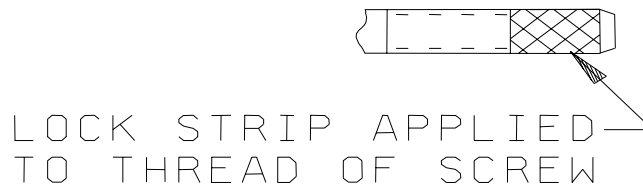


FIGURE 3. Screw self-locking element details.

Lockwasher, flatwasher, and screw self-locking element. Card holders requiring a lockwasher, flatwasher, and screw self-locking element option shall include a suffix "D" in the PIN (see classification and notes).

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification information for PIN format example.

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>MFGRs CAGE</u>	<u>MFGRs Name and Address</u>	<u>MGFRs contact Information</u>
18915	APW Electronic Solutions 14100 Danielson Street Poway, CA 92064-6898	Tel: (858) 679-4550 Toll Free: (800) 854-7086 Fax: (858) 679-4555 E-mail: sales.electronicsolutions@apw.com URL: www.apw.com
52094	Calmark Corporation 4915 Walnut Grove Avenue San Gabriel, CA 91776-2099	Tel: (626) 287-0451 Fax: (626) 287-7350 E-mail: sales@calmark.com URL: www.calmark.com
71286	Fairchild Fasteners Camloc / Ram Products Division 3000 W. Lomita Blvd. Torrance, CA 90505-5103	Tel: (310) 784-2662 Fax: (310) 784-2628 E-mail: altedesco@fairchildfasteners.com URL: www.fairchildfasteners.com

Part number (P/N) supersession data. These CID specification sheet part numbers supersede the following manufacturer's P/Ns as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE II. Commercial P/N supersession data. 1/

PIN designator AA59590/07	Vendor similar designator or type part number 2/ CAGE 18915	PIN designator AA59590/07	Vendor similar designator or type part number 2/ CAGE 52094
CJ28	42-6	CJ28	230-2.80H
CN28	42-6-A	CN28	230-2.80
CT28	42-6-T	CT28	230-2.80T0
CV28	42-6-S	CV28	230-2.80T2
CJ28E	42-6-L	CJ28E	230-2.80HL
CN28E	42-6-A-L	CN28E	230-2.80L
CT28E	42-6-T-L	CT28E	230-2.80T0L
CV28E	42-6-S-L	CV28E	230-2.80T2L
CJ28W	42-6-LF	CJ28W	W230-2.80H
CN28W	42-6-LF-A	CN28W	W230-2.80
CT28W	42-6-LF-T	CT28W	W230-2.80T0
CV28W	42-6-LF-S	CV28W	W230-2.80T2
CJ28D	42-6-LF-L	CJ28D	W230-2.80HL
CN28D	42-6-LF-A-L	CN28D	W230-2.80L
CT28D	42-6-LF-T-L	CT28D	W230-2.80T0L
CV28D	42-6-LF-S-L	CV28D	W230-2.80T2L

See footnotes at end of table.

TABLE II. Commercial P/N supersession data – Continued.

PIN designator AA59590/07	Vendor similar designator or type part number <u>2/</u> CAGE 18915	PIN designator AA59590/07	Vendor similar designator or type part number <u>2/</u> CAGE 52094
BJ28	42-6-B	BJ28	A230-2.80H
BN28	42-6-B-A	BN28	A230-2.80
BT28	42-6-B-T	BT28	A230-2.80T0
BV28	42-6-B-S	BV28	A230-2.80T2
BJ28E	42-6-B-L	BJ28E	A230-2.80HL
BN28E	42-6-B-A-L	BN28E	A230-2.80L
BT28E	42-6-B-T-L	BT28E	A230-2.80T0L
BV28E	42-6-B-S-L	BV28E	A230-2.80T2L
BJ28W	42-6-B-LF	BJ28W	WA230-2.80H
BN28W	42-6-B-LF-A	BN28W	WA230-2.80
BT28W	42-6-B-LF-T	BT28W	WA230-2.80T0
BV28W	42-6-B-LF-S	BV28W	WA230-2.80T2
BJ28D	42-6-B-LF-L	BJ28D	WA230-2.80HL
BN28D	42-6-B-LF-A-L	BN28D	WA230-2.80L
BT28D	42-6-B-LF-T-L	BT28D	WA230-2.80T0L
BV28D	42-6-B-LF-S-L	BV28D	WA230-2.80T2L
HJ28	42-6-B3	HJ28	HA230-2.80H
HN28	42-6-B3-A	HN28	HA230-2.80
HT28	42-6-B3-T	HT28	HA230-2.80T0
HV28	42-6-B3-S	HV28	HA230-2.80T2
HJ28E	42-6-B3-L	HJ28E	HA230-2.80HL
HN28E	42-6-B3-A-L	HN28E	HA230-2.80L
HT28E	42-6-B3-T-L	HT28E	HA230-2.80T0L
HV28E	42-6-B3-S-L	HV28E	HA230-2.80T2L
HJ28W	42-6-B3-LF	HJ28W	WHA230-2.80H
HN28W	42-6-B3-LF-A	HN28W	WHA230-2.80
HT28W	42-6-B3-LF-T	HT28W	WHA230-2.80T0
HV28W	42-6-B3-LF-S	HV28W	WHA230-2.80T2
HJ28D	42-6-B3-LF-L	HJ28D	WHA230-2.80HL
HN28D	42-6-B3-LF-A-L	HN28D	WHA230-2.80L
HT28D	42-6-B3-LF-T-L	HT28D	WHA230-2.80T0L
HV28D	42-6-B3-LF-S-L	HV28D	WHA230-2.80T2L

1/ CID PINs listed only with length designator "28".

2/ The manufacturer's P/N shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of the basic CID.

TABLE III. Example of PIN with available length designators.

PIN designator AA59590/07	Vendor similar designator or type part number ^{1/} CAGE 18915	PIN designator AA59590/07	Vendor similar designator or type part number ^{1/} CAGE 52094
CJ28	42-6	CJ28	230-2.80H
CJ30	42-1014-3.00	CJ30	230-3.00H
CJ35	42-1014-3.50	CJ35	230-3.50H
CJ38	42-8	CJ38	230-3.80H
CJ48	42-10	CJ48	230-4.80H
CK53	42-11	CJ53	230-5.30H
CK58	42-12	CJ58	230-5.80H

^{1/} The manufacturer's P/N shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph of the basic CID.

TABLE IV. Supersession information.

Superseded (old) PIN in accordance with DSCC Drawing 84103	Superseding (new) CID PIN	Superseded (old) PIN in accordance with DSCC Drawing 84103	Superseding (new) CID PIN
84103-38B	AA59590/07BJ28	84103-38C	AA59590/07CJ28
84103-39B	AA59590/07BJ30	84103-39C	AA59590/07CJ30
84103-40B	AA59590/07BJ35	84103-40C	AA59590/07CJ35
84103-41B	AA59590/07BJ38	84103-41C	AA59590/07CJ38
84103-42B	AA59590/07BJ48	84103-42C	AA59590/07CJ48
84103-43B	AA59590/07BJ53	84103-43C	AA59590/07CJ53
84103-44B	AA59590/07BJ58	84103-44C	AA59590/07CJ58

MILITARY INTERESTS:

Custodians:
 Army – CR
 Navy – EC
 Air Force – 11
 DLA – CC

Review activity:
 Army – MI

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – 7FXE
 Preparing Activity
 DLA – CC
 Project 5998-0103